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 (FILE 'HOME' ENTERED AT 13:22:29 ON 16 MAY 2006)

     FILE 'AGRICOLA, MEDLINE, CAPLUS, BIOSIS' ENTERED AT 13:22:32 ON 16 MAY
     2006
L1          15300 S GLUCOSE (1N) DEHYDROGENASE
L2             23 S L1 (10N) (FUSION OR FUSED)
L3              9 S L2 AND (DETECT? OR MARK?)
L4              6 DUP REM L3 (3 DUPLICATES REMOVED)

     FILE 'STNGUIDE' ENTERED AT 13:23:39 ON 16 MAY 2006

     FILE 'AGRICOLA, MEDLINE, CAPLUS, BIOSIS' ENTERED AT 13:25:22 ON 16 MAY
     2006
L5            168 S L1 AND (FUSION OR FUSED)
L6             48 S L5 AND (SDS OR DETECT? OR MARK?)
L7             34 S L6 AND PY<2000
L8             22 DUP REM L7 (12 DUPLICATES REMOVED)

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L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:441291 CAPLUS

DN 138:149814

TI **Glucose dehydrogenase** as **detector** protein of recombinant **fusion**-proteins directly in SDS gels

AU Burger, Christa; Linxweiler, Winfried; Poschke, Oliver; Wolf, Andrea; Hofmann, Uwe; Rieke, Erwin

CS Merck KGaA, Darmstadt, Germany

SO Animal Cell Technology: From Target to Market, Proceedings of the ESACT Meeting, 17th, Tyloesand, Sweden, June 10-14, 2001 (2001), 66-68. Editor(s): Lindner-Olsson, Elisabeth; Chatzissavidou, Nathalie; Luellau, Elke. Publisher: Kluwer Academic Publishers, Dordrecht, Neth. CODEN: 69CRYK; ISBN: 1-4020-0264-5

DT Conference

LA English

AB The enzyme **glucose-dehydrogenase** (GlcDH) was employed as a **fusion** partner in the **detection** and anal. of recombinant protein in SDS gel. Complete cell extract of bacteria expressing a Tridigin-GlcDH fusion protein was separated on SDS gel, stained for active GlcDH and counterstained with Coomassie blue. In the extract of 100 μl of bacteria, the GlcDH fusion protein was good **detectable** as well as some degradation products. GlcDH from Bacillus megaterium could serve as a unique sensitive tag for proteins, and its remarkable property to retain enzymic activity under stringent SDS conditions permitted the anal. of proteins. The size of the expressed fusion protein, the quality of the expression and the amount of the fusion protein were immediately visible.

L7 ANSWER 13 OF 34 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:116025 CAPLUS

DN 122:122206

TI Application of enzyme field-effect transistor sensor arrays as **detectors** in a flow-injection system for simultaneous monitoring of medium components. Part I. Preparation and calibration.

AU Kullick, T.; Beyer, M.; Henning, J.; Lerch, T.; Quack, R.; Zeitz, A.; Hitzmann, B.; Scheper, T.; Schuegerl, K.

CS Institute for Technical Chemistry, University of Hannover, Callinstr. 3, Hannover, D-30167, Germany

SO Analytica Chimica Acta (**1994**), 296(3), 263-9
CODEN: ACACAM; ISSN: 0003-2670

DT Journal

LA English

AB Enzymes were (co)immobilized on the pH-sensitive gates of an eight-channel field-effect transistor (FET). Glucose was analyzed with a **glucose dehydrogenase** (GDH) FET, maltose with a coimmobilized maltase (MAL)/GDH FET, sucrose with a coimmobilized invertase (INV)/GDH FET, lactose with a β-galactosidase (β-GAL)/galactose dehydrogenase (GALDH)- **fusion** protein FET and ethanol with a coimmobilized alc. dehydrogenase (ADH)/aldehyde dehydrogenase (ALDH) FET. These EnFETs were integrated in FIA systems, calibrated and characterized with respect to buffer capacity, pH value, stirrer speed and NAD concentration and cross sensitivity. On account of the

pH

and buffer capacity sensitivity of the signals of the EnFETs, the pH value was monitored with a pH-FET of the array and the buffer capacity and substrate concentration were calculated from the shape of the signal of the FIA system. The EnFETs were stored at 4° for many months without activity loss. They have satisfactory activity for performing a large number of analyses.